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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747,008	12/22/2000	Todd C. Pamell	M-8696 US	2943

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HAMILTON & TERRILE, LLP
P.O. BOX 203518
AUSTIN, TX 78720

EXAMINER

HOLMES, MICHAEL B

ART UNIT PAPER NUMBER

2121

DATE MAILED: 04/22/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/747,008

Applicant(s)

PARNELL, TODD C.

Examiner

Michael B. Holmes

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.



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Examiner's Detailed Office Action

1. This Office Action is responsive to application **09/747,008**, filed **December 22, 2000**.
2. **Claims 1-43** have been examined.

Information Disclosure Statement

3. Applicant is respectfully remind of the ongoing Duty to disclose 37 C.F.R. 1.56 all pertinent information and material pertaining to the patentability of applicant's claimed invention, by continuing to submitting in a timely manner PTO-1449, Information Disclosure Statement (IDS) with the filing of applicant's of application or thereafter.

Drawings

4. The formal drawings have been reviewed by the United States Patent & Trademark Office of Draftperson's Patent Drawings Review.

Specification

5. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is required in correcting any errors of which applicant may become aware in the specification.

Claim Interpretation

6. Office personnel are to give claims their "**broadest reasonable interpretation**" in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See *also *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow. . . . The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed. . . . An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process."). *see* MPEP § 2106

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-43** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Horvitz et al. (USPN 6,161,130), Filed: Jun. 23, 1998; Date of Patent: Dec. 12, 2000,

in view of

Bownam-Amuah (USPN 6,332,163), Filed: Sep. 1, 1999; Date of Patent: Dec. 18, 2001.

Regarding claims 1, 5, 9, 17, 22, 27, 31, 36, & 40:

Horvitz et al. teaches,

a plurality non-hierarchically organized classifiers [(col. 4, line 54 to col. 5, line 14 "*In accordance with our specific inventive teachings, each incoming e-mail message, in such a stream, is first analyzed to determine which feature(s) in a set of N predefined features, i.e., distinctions, (where N is an integer), that are particularly characteristic of spam, the message contains. These features (i.e., the "feature set") include both simple-word-based features and handcrafted features. A feature vector, with one element for each feature in the set, is produced for each such message. The contents of the vector are applied as input to a probabilistic classifier, such a modified Support Vector Machine (SVM) classifier, which, based on the features that are present or absent from the message, generates a continuous probabilistic measure as to whether that message is spam or not. This measure is then compared against a*

preset threshold value. If, for any message, its associated probabilistic measure equals or exceeds the threshold, then this message is classified as spam and, e.g., stored in a spam folder. Conversely, if the probabilistic measure for this message is less than the threshold, then the message is classified as legitimate and hence, e.g., stored in a legitimate mail folder. The contents of the legitimate mail folder are then displayed by a client e-mail program for user selection and review. The contents of the spam folder will only be displayed by the client e-mail program upon a specific user request. The messages in the spam folder can be sorted by increasing probability that the messages are spam, so that the user need only check that the top few messages are indeed spam before deleting all the messages in the folder.”)]

Horvitz et al. does not explicitly teach hierarchical data structures employed as classifiers.

However, *Bownam-Amuah* teaches hierarchical data structure employed as classifiers.

[(col. 58, line 53 to col. 59, line 52 “FIG. 16 illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc.”)] It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matters pertains, to combine *Horvitz et al.* with *Bowman-Amuah* to produce a method of employing non-hierarchically organized classifiers into hierarchically classifiers for classifying data. Classifiers, albeit not universally agreed upon in definition (e.g., a classifier system allows the user to train event recognition functions, or classifiers, to recognize patterns in the sensory data and tag them as specific events), basically, are a kind of rule-based system with general mechanisms for processing rules in parallel, for adaptive generation of new rules, and for testing

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the effectiveness of existing rules. Classifier systems provide a framework in which a population of rules encoded as bit strings evolves on the basis of intermittently given stimuli and reinforcement from its environment. The system "learns" which responses are appropriate when a stimulus is presented. Moreover, a classifier system may consists of the following components: detector and effect, message system, role system, apportionment of credit system, and genetic procedure.

Regarding claims 2-4, 6-8, 10-16, 18-21, 23-26, 28-30, 32-35, 37-39, & 41-43:

Claims 2-4, 6-8, 10-16, 18-21, 23-26, 28-30, 32-35, 37-39, & 41-43 add no novelty and are **rejected** for the same rational as the independent claim.

Conclusion

9. The prior art made of record and (listed of form **PTO-892**) not relied upon is considered pertinent to applicant's disclosure as follows. Applicant or applicant's representative is respectfully reminded that in process of patent prosecution i.e., amending of claims in response to a rejection of claims set forth by the Examiner per Title 35 U.S.C. The patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and any objections made. Moreover, applicant or applicant's representative must clearly show how the amendments avoid or overcome such references and objections. *See 37 CFR § 1.111(c).*

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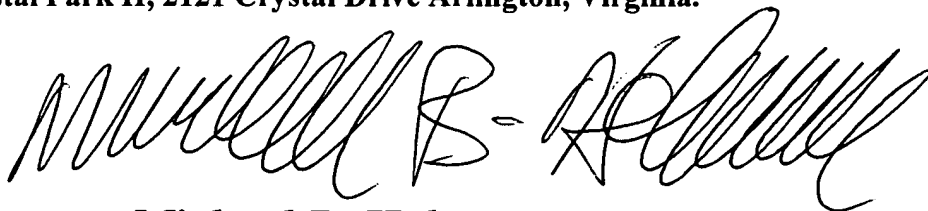
Correspondence Information

10. Any inquiries concerning this communication or earlier communications from the examiner should be directed to **Michael B. Holmes** who may be reached via telephone at **(703) 308-6280**. The examiner can normally be reached Monday through Friday between 8:00 a.m. and 5:00 p.m. eastern standard time.

If you need to send the Examiner, a facsimile transmission regarding After Final issues, please send it to **(703) 746-7238**. If you need to send an Official facsimile transmission, please send it to **(703) 746-7239**. If you would like to send a Non-Official (draft) facsimile transmission the fax is **(703) 746-7240**. If any attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, **Anthony Knight**, may be reached at **(703) 308-3179**.

Any response to this office action should be mailed too:

Director of Patents and Trademarks Washington, D.C. 20231. Hand-delivered responses should be delivered to the Receptionist, located on the fourth floor of **Crystal Park II, 2121 Crystal Drive Arlington, Virginia**.

A handwritten signature in black ink, appearing to read 'Michael B. Holmes', with a stylized flourish at the end.

Michael B. Holmes

Patent Examiner
Artificial Intelligence
Art Unit 2121

United States Department of Commerce
Patent & Trademark Office